

ABSTRACT OF THE DISCLOSURE

A magnetoresistive element includes a multilayer film configuration including: a tunnel insulation layer; and a pair of magnetic layers that are laminated with the tunnel insulation layer interposed therebetween. A
5 resistance value of the magnetoresistive element varies with a relative angle between magnetic orientations of both of the magnetic layers, and at least one of the magnetic layers includes a magnetic film having a thermal expansion coefficient not greater than a value obtained by adding $2 \times 10^{-6}/K$ to a thermal expansion coefficient of the tunnel insulation layer. The thus
10 configured magnetoresistive element can exert excellent thermal stability. The use of such a magnetoresistive element can realize a magnetic head, a magnetic memory element and a magnetic recording apparatus with excellent thermal stability.